Accredited by the American College of Radiology

ADVANCED IMAGING CENTER

January 14, 2008

## **CASE REPORT: TESTICULAR MICROLITHIASIS**

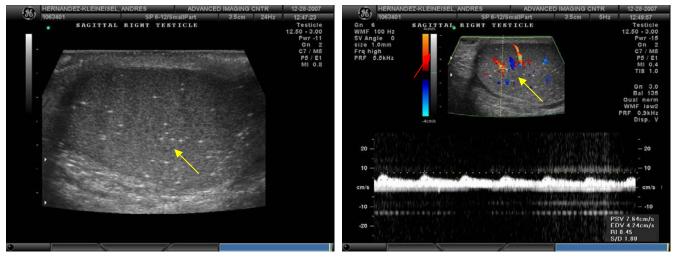


Fig. 1

Fig. 2

**<u>CLINICAL PRESENTATION</u>**: This is a 14-year-old male who presented with a possible testicular mass. An ultrasound with Doppler was performed at AIC as requested by Pediatrician **Dr. Satey, MD**.

**IMAGING FINDINGS:** Fig. 1 is a sagittal image of the testicle showing numerous punctuate echogenic foci (calcifications). Some refer to this as a "starry sky" appearance. No significant shadowing is noted, however, probably due to small size of the calcifications. Fig. 2 is a Doppler scan showing normal flow to the testicles and mild hydrocele but no torsion.

**DIAGNOSIS**: These findings are compatible with Testicular Microlithiasis (TM). It is usually a benign condition. There have been reports of concomitant malignancies such as germ cell tumors in patients with TM. This patient had no other mass.

**DISCUSSION:** There is an association with testicular intratubular germ cell neoplasia (IGCN), germ cell version of carcinoma-in-situ (CIS). TM is relatively rare with prevalence of approximately 0.6% of testicular ultrasonograms. TM has been associated in both benign and malignant conditions such as Klinefelter syndrome, male pseudohermaphroditism, Down syndrome, infertility, cryptorchism, hypogonadism, fragile X syndrome, pseudoxanthoma elasticum, and pulmonary microlithiasis.<sup>1</sup> Many of these benign conditions are risk factors for testicular malignancies. As per Reference #1 below, there is up to 20-fold increased risk of testicular cancer, requiring sonographic surveillance for tumor.

Ray Hashemi, MD

Ray H. Hashemi, M.D., Ph.D. Director

**<u>1. REFERENCE</u>**: Adedayo A. Onitilo, MD, MSCR, FACP. Testicular Microlithiasis: Another Starry Sky Appearance. Clin Med Res. 2007 October; 5(3): 163–164.

Valencia: 25842 Tournament Road Phone (661) 255-0060 Fax (661) 255-0024 www.aicValencia.com Lancaster: 43731 N. 15th Street West Phone (661) 949-8111 Fax (661) 949-6600 www.aicLancaster.com **Palmdale:** 1529 E. Palmdale Blvd, Suite 100 Phone (661) 456-2020 Fax (661) 456-2021 www.aicLancaster.com